

**Abstract**

An interconnect network for operation within communication node, wherein the interconnect network may have features including the ability to transfer a variety of communication protocols, scalable bandwidth and reduced down-time. According to one embodiment of the invention, the communication node includes a plurality of I/O channels for coupling information into and out of the node, and the interconnect network includes at least one local interconnect module having local transfer elements for transferring information between the plurality of I/O channels; and scaling elements for expanding the interconnect network to include additional local interconnect modules, such that information can be transferred between the local interconnect modules included in the interconnect network.

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